



- Reduce the development of unauthorized roads and trails and the associated impacts to water resources and aquatic ecosystems, wildlife, and user conflicts
- Identify the minimum road system needed for safe and efficient travel and for administration, utilization, and protection of National Forest System lands

The travel management planning process will aim to provide a variety of road and trail access opportunities for recreation, special uses, other forest resource management, and fire protection activities (pg. 102-103).

The Greater Yellowstone Coalition's primary concerns related to travel planning are the impacts of the motorized route system upon wildlife connectivity and health of the natural ecosystem. The below table of contents is our attempt to categorize each element that we feel should be addressed in the Environmental Impact Statement (EIS) for the Shoshone National Forest Travel Management Plan (SNF TMP).

Table of Contents

Purpose and Need Clarification
Existing Use and Trends
Manageable System
User Compliance and Accountability – Enforcement
Roadless and Backcountry Character
Soundscape
Invasive Plant Species
Stream Sediment & Water Quality
Wildlife Migration Corridors
Seasonal Closures
Decommissioning Routes
Grizzly Bear Conflict Reduction
Dispersed Camping Spur Extensions/Inclusions
Specific Proposals in Scoping Document
Conclusion

PURPOSE AND NEED CLARIFICATION

The Shoshone National Forest Travel Management Scoping Document (SNF TM SD), May 2016 defines the purpose and need for action in accordance with Executive Orders, travel management regulations, and through the forest planning effort. Four bullet points are noted:

 There is a need to provide some level of motorized routes to a growing user group on the Shoshone National Forest. The Forest Plan directs us to look for opportunities to provide "loop" opportunities for motorized use.

- An additional need of equal importance is to ensure or improve compliance and accountability on the existing Road and trail system.
- Another need is to consider if there are current routes with resource concerns or enforcement issues which could be removed or changed in the system.
- Finally, there is a need to designate roads, trails, and areas for winter motorized travel and produce an over snow vehicle use map. This direction stems from a recent court decision and a subsequent revision of the 2005 Travel Management Rule.

Three of the four bullet points seem to support the stated objective "...to provide a manageable system of designated public motor vehicle access routes and areas... (SNF TM SD, pg. 6)," as well as, appear to be further validated throughout the Shoshone National Forest Land Management Plan Revision process just completed in 2015. However, the first bullet point seems counterintuitive to majority opinion voiced during the ten years (2005-2015) of the SNF Land Management Plan Revision (LMP) process.

I 2008 survey conducted by Colorado State University and funded by the State of Wyoming's Governor's Planning Office¹, researchers investigated public values and preferences in counties bordering the SNF provides valuable insights. In documenting favorable public uses of the SNF, the vast majority of respondents strongly supported wildlife health and non-motorized opportunities over ATV recreation. The most favorable public preferences for use of the SNF included: wildlife viewing (98 percent); fish and wildlife habitat (96 percent); non-motorized recreation (89 percent); Horse packing (85 percent); compared to ATV recreation (39 percent). Furthermore, upon reviewing the individual unique comments that were submitted in 2012 to the Shoshone National Forest on the Management Plan DEIS, it would appear that the need is to maintain/reduce motorized development on the forest. Of the 1,030 individual unique comments submitted, seventy percent (749 letters) specifically addressed the topic of motorized use. Three-quarters (75%) of those commenting on motorized use, opposed any more motorized access on the Shoshone. In addition, the Shoshone received 22,400 form comments during the plan revision - 99% of those opposed more motorized development. Hence, further investigation, reasoning, and clarification is warranted to validate this need articulated in the first bullet point.

EXISTING USE AND TRENDS

As the Forest is compiling its EIS for this Travel Management Plan, please include more in-depth study of the range of users utilizing the various motorized routes on the forest. It would be valuable to understand which user groups (four-wheeled jeep touring; driving pleasure with highway vehicle; OHV recreational riding; bike/foot/horse accessing trail heads; hunting access; special use access; other) are growing, to what degree, and what their actual and anticipated needs are with regards to the Forest's motorized route system. When incorporating any trends, please represent the data in five to ten year

¹ Clement, J., Cheng, A. 2008. Report: Study of preferences and values on the Shoshone National Forest. Department of Forest, Rangeland and Watershed Stewardship; Colorado State University.

increments over a thirty to fifty-year window as to be most informative in showing where things may/may not be leveling out, growing, or declining.

Once the user groups utilizing the motorized routes are identified, please include a big picture analysis of local, regional, and national user patterns. For example, identify where the recreationalist (from each identified use) who lives in Cody, Thermopolis, Riverton, Lander, Dubois, and so forth currently go to enjoy their desired use(s) and what makes it a satisfying experience. The premise for this inquiry is to acknowledge that no one place can make everyone happy, however multiple places within reasonable distance can satisfy a significant number of users from a rounded spectrum of needs. Because nearly everyone uses a motorized route to some degree, this analysis can inform not only the large scale travel management, but an even larger view of regional landscape recreation distribution. Understanding this distribution can help justify varying degrees and types of motorized access and routes throughout the forest and on public lands regionally.

Also, please assess existing and potential localized user conflicts throughout the forest and provide solutions in the alternatives. For example the images below are from the Clarks Fork Ranger District where a potential escalation of user conflict at Little Sunlight Campground could emerge. Images illustrate opposite sides of the road, one staging for horse use while the other for OHV use.



Finally, please also include an assessment of the Forest's capacity to satisfy those user groups and their needs with relationship to the SNF's "niche as a back country forest", objective to provide a "manageable system" of motorized routes, and alignment with the 2015 SNF LMP.

MANAGEABLE SYSTEM

Within the EIS, please identify the parameters that define a "manageable system of designated pubic motor vehicle access routes and areas (SNF TM SD, pg. 6)." Furthermore, the Executive Order 11644 requires "...that the use of off-road vehicles on public lands will be controlled and directed so as to protect the resources of those lands, to promote the safety of all users of those lands, and to minimize conflicts among the various uses of those lands."²

² Executive Order 11644. http://www.archives.gov/federal-register/codification/executive-order/11644.html



Washakie Ranger District – along 305 – Illustrates concerns about and need to study the impacts of:

- Forest ability/inability to ensure proper route construction and maintenance.
- Forest ability/inability to promote safety and notify users of route condition prior to use in order for users to determine vehicle choice and properly prepare.

Wapiti Ranger District – along 401– Illustrates concerns about:

- Forest ability/inability to ensure proper route construction and maintenance.
- Forest ability/inability to encourage compliance to stay on existing route, rather than move to side because main path is unmaintained and rendered unsafe by user.



These images taken in the Wind River Ranger District – Long Creek Area – on authorized routes during an authorized season illustrate some of our concerns about creating a "manageable system", including:

- Feasibility of long-term route maintenance and unmitigated resource damage,
- Improper/ineffective/non-existent/unenforceable seasonal closures, and
- Temptations of SNF to default to user group self-regulation.



Please address in the EIS, the SNF methods for monitoring, educating, enforcing, repairing and essentially managing its "manageable system of designated pubic motor vehicle access routes and areas."³ Please assess the fiscal responsibility for the long term management of the motor vehicle route system within each alternative.

Please include an adaptive management strategy looking at the effects of possible adjustments and acceptable tools that may occur/be used during the implement-monitor-adapt phase post plan completion (36 CFR 220.5(e)(2) and §220.7(b)(2)(iv)).

Please complete a current and required Travel Analysis (2005 Travel Management Rule 36 CFR 212 Subpart A) for SNF. "This means the Forest Service takes a broad look at the whole road system and the associated risks and benefits to users and resources. It's a science-based process coupled with input from interested public, including those who use and are affected by the roads. The process will identify potential opportunities for changes to the road system. Inputs to the process include ecological, social, cultural and economic information." Please use this Travel Analysis that postdates the Forest Plan Revision in order to have the most current assessment available to help inform the EIS for the SNF Travel Management Plan.

USER COMPLIANCE AND ACCOUNTABLITY – ENFORCEMENT

The second bullet point listed in the scoping document under purpose and need for developing a travel management plan is to address user compliance and accountability. This need is further reiterated in the Shoshone National Forest Land Management Plan 2015 Revision (SNF LMP 2015 Revision) as one of the two goals of travel management planning: "Reduce the development of unauthorized roads and trails and the associated impacts to water resources and aquatic ecosystems, wildlife, and user conflicts (pg.104)." Furthermore, the Final EIS of the SNF LMP, 2015 Revision obverses, "Increases in off-highway vehicle recreation in unauthorized areas are leading to increased wildlife disturbance, soil erosion, and sedimentation in streams (Vol. 1, pg.8)." These images from Wind River Ranger District – Long Creek Area – illustrates these points and our concerns with unenforced/unmanaged persistent use of unauthorized trail and unmonitored resource damage that ought to be evaluated in the EIS.

³ SNF TM SD, pg. 6

⁴ Overview of Travel Analysis Required Under Subpart A: Administration of the Forest Transportation System: http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5423799.pdf



The previous request to include an analysis of the spectrum of users may help inform the reasons for non-compliance and how to best target specific user groups at fault. Please try to correlate user group and tendencies to pioneering and use of unauthorized routes in order to better target outreach and enforcement efforts. Along with understanding the user groups, please include in the EIS a full inventory of the existing unauthorized and/or illegal motorized routes; an assessment of damage along each route; and a description of how illegal motorized routes will be addressed in each alternative.

We encourage the forest to incorporate the Wyoming Wilderness Association Travel Monitoring Report into the EIS analysis. This citizen collected motorized travel monitoring data that Wyoming Wilderness Association presents and references in their scoping comments can be found here: wildwyo.org. The Travel Monitoring Report (TMR 2016) illustrates the most common type of motorized use observations, offers constructive suggestions, and explains how to interpret the Google Earth and Excel databases demonstrating existing motorized use concerns.

From our field research, we have found some issues that we would also like to specifically see addressed in the EIS with regards to education, enforcement and user accountability. These images taken on the Wind River Ranger District – Warm Springs Area – illustrate a lack of comprehension of an existing sign at the staging area by not following the "official map," combined with absence of additional route makers resulting in continued unauthorized use (the OHV is on pioneered route, dog is on authorized).



Contrary to the above images, the below image was taken on the Greybull Ranger District and shows an example of additional route signage that is installed, yet avoids corrupting the integrity of the surrounding wildness of the forest experience. Such measures help enforce the MVUM by further guiding users, who may not have the MVUM at their fingertips while driving, and show users that the Forest Ranger District personnel are actively managing the forest's resources.



Below is another example from the Wind River Ranger District. They show unauthorized motorized routes that are not marked, either open/closed, nor does there exist a "no motorized use" sign. As a result consistent recreational activity persists. Whether this exemplifies naivety of the MVUM, an inability to read/navigate with maps, lack of GPS capability to validate location, or blatant disregard for law; this behavior challenges our trust in user capacity to self-regulate, which has been suggested by motorized recreational enthusiast during the preliminary phases of this travel management planning process. Please assess the environmental impacts of defaulting to user's self-enforcement.



Another concern that arises from the above images is that the forest has made efforts in other areas to mitigate some of this misuse, yet not in other areas. Above on the left is in the Warm Springs Area and appeared to be a logging road; while the image on the right from the Long Creek Area is likely an example of a user pioneered route. Below are images of a logging road closure on the Greybull Ranger District in the Twin Lakes Area. This is an effective closure is defensible and without many words notifies folks that although temporary road exists, the route is closed for motorized recreation yet remains open for non-motorized users. Please include a plan for signage, barriers, education that is consistent throughout the forest districts.



Compliance challenges vary from users pioneering new unauthorized/non-system routes and continued use of these existing unauthorized/non-system routes to riding off trail in open meadows and pushing the limits of the authorized 300 foot dispersed camping regulation. Below is an image from the Clarks Fork Ranger District, off of Morison Jeep Road (120) on the left and one on the right from the Wapiti Ranger District off route 483.1B that illustrate dispersed campsites that are accessed by a pioneered and unauthorized spur more than 300 feet from route 120's center line.⁵

⁵ Shoshone National Forest Motor Vehicle Use Map





These are only two examples of an issue that is prolific throughout the forest. This type of non-compliant trespass creates lasting damage to fragile forest resources. Please evaluate measures to decommission such routes in order to restore their natural backcountry character, and to prevent such negligent/insubordinate behaviors from persisting.

Lastly, please consider the suggestions that come out of the Shoshone National Forest Motorized Compliance Working Group. Please evaluate each tactic and its parameters for effectiveness to determine best proven response for the range of compliance issues identified by the various submitted scoping comments, the working group, and through the EIS process. Some tactics to evaluate include: increased uniformed staff in field; blockades placed at the end of in/out or spur routes may prevent those routes from creeping beyond the official endpoint; signage directing users to the authorized system routes with things like confidence and mileage markers that may prevent the unguided/ill-informed user from riding illegally; signage discouraging the use of unauthorized/pioneered routes; type of sign anchors such as, carsonite, metal post, tree or gate; and seasonal closure signs that can be viewed year round weather gate open/closed. Please provide a cost benefit analysis of the variety of tools/tactics to help inform the SNF implementation plan for each alternative and the proposed action with regards to effectively encouraging compliance throughout the SNF (both north and south zones equally).

ROADLESS AND BACKCOUNTRY CHARACTER

Along with the user group spectrum analysis, please include some assessment of the forest's capacity to meet those needs in relation to fulfilling its niche as a backcountry forest. This may require further defining the actual characteristics of being a backcountry forest that SNF hopes to fulfil.

Please also study the impacts of designated motorized trails and roads on important wildlife habitat, including winter range, areas critical to wildlife connectivity, and aquatic/riparian habitats, specifically in and around Inventoried Roadless Areas (IRA). Please include an evaluation of the motorized route density within IRAs, as well as areas outside of wilderness and not within the IRA, yet within the forest. Please assess the known unauthorized use in Roadless areas to show the true impact of legal and illegal motorized access on Roadless character.

SOUNDSCAPE

The US Navy defines a hazardous noise level as ≥85 dBA SPL steady state/continuous noise. For reference an average speaking voice is 60dB (pg.17).⁶ Small urban communities away from main highways and county roads experience outdoor sound levels that are typically lower than 50 dB (Cunniff 1977, Harris 1991). An approximate noise level range for the more popular brands of OHVs is between 80 and 108 dB (Oregon Off-Highway Vehicle Association [OOHVA] 2002).⁷

In the EIS, please study the impacts of sound produced by the range of motorized vehicle use expected (diesel truck, 4x4 jeep, ATV, OHV, motorcycle (Harley to dirt bike), electric bicycle, and snowmobile) during the times of year these vehicles would be used. This analysis of noise propagation should include the range of forest use from scenic highway to motorized single trail traffic in order to see the full effect on noise on the forest landscape. Please include projections that match the anticipated use level, as well as existing use levels. For example, many OHV clubs ride in large groups, which may augment the range of sound disturbance. The characteristics of sound include frequency (pitch), intensity (loudness), duration (time), and spectrum (quality). All of these should be included in that analysis, as well as, audiogram depictions and visual presentation of the effects/distance of the sound range on the landscape.

This type of analysis is critical to evaluating the impacts of noise and route density effects within the forest upon the wildlife and other users of the forest. Numerous key wildlife species are more adversely affected by motorized use, including Grizzly Bear, Rocky Mountain Elk and Big Horn Sheep. The Shoshone National Forest has articulated in various ways the importance of each of these species. Below is one example of research that supports this link between the density of motorized use and its effect on wildlife.

Wisdom et al. (2004) found that elk moved when ORVs passed within 2,000 yards but tolerated hikers within 500 ft. Wisdom (2007) reported preliminary results suggesting that ORVs are causing a shift in the spatial distribution of elk that could increase energy expenditures and decrease foraging opportunities for the herd. Elk have been found to readily avoid and be displaced from roaded areas (Irwin and Peek, 1979; Hershey and Leege, 1982; Millspaugh, 1995). Additional concomitant effects can occur, such as major declines in survival of elk calves due to repeated displacement of elk during the calving season (Phillips, 1998). Alternatively, closing or decommissioning roads has been found to decrease elk disturbance (Millspaugh et al., 2000; Rowland et al., 2005).8

⁶ Occupational Audiology: Hearing Conservation Training Course Student Manual. United States of America, Department of the Navy. Edition 2013. http://www.med.navy.mil/sites/nmcphc/Documents/oem/Hearing-Conservation-Training-Course-Student-Manual.pdf

⁷ Proposed Resource Management Plan and Final Environmental Impact Statement for Pinedale Field Office; FEIS Chapter 3 pg. 104. BLM: August 2008.

⁸ The Wilderness Society, Using Road Density as a Metric for Ecological Health in National Forests: What Roads and Routes should be Included? Summary of Scientific Information, Last Updated, November 22, 2012.

Studies have also shown that people exposed to 90 decibel noise of 4000 hertz for 10 minutes show increases in both systolic and diastolic blood pressures.⁹ This suggests that physiological effects could also be occurring in wildlife exposed to similar sound scenarios.

A full analysis of the soundscape in relationship to the existing and proposed motorized routes on the Shoshone National Forest ought to help articulate the effects on varying wildlife species; as well as other desired recreational experiences. Furthermore, this analysis may better inform appropriate seasonal restrictions on motorized routes.

INVASIVE PLANT SPECIES

Please provide an analysis of existing locations of invasive plant species; those locations in relationship to motorized routes; and projections of potential spread along with abilities to control/mitigate for the spread of invasive plants. The Shoshone National Forest serves as valuable habitat for an array of wildlife. Many of those animals rely on specific native plants for their nourishment. Furthermore, livestock also rely on the delicate native flora. Native plant species can be adversely affected by motorized routes, whether they are classified as trails or roads. As noted in the FEIS of the Shoshone National Forest Land Management Plan 2015 Revision (SNF LMP):

Off-road vehicle activities that create bare or disturbed soil provide conditions for invasive species establishment and spread, including on roads and roadsides, trails, and trailheads, parking lots, developed and dispersed camping sites, popular fishing locations, and heavy-use areas around summer homes and lodges. Off-road vehicle travel has high potential to introduce and spread noxious weeds, and in turn move rangeland vegetation away from desired conditions. (Vol. 1, pg. 172, CD Version)

Motorized travel has a high probability of introducing non-native invasive species.

With knobby tires and large undercarriages, ORVs can unintentionally transport invasive non-native species deep into forestlands. For example, one study found that in a single trip on a 16.1 km (10 mi) course in Montana, an ORV dispersed 2,000 spotted knapweed (*Centaurea stoebe*) seeds (Montana State University 1992). In Wisconsin, a survey of seven invasive plant species along ORV routes found at least one of these exotic plant species on 88% of segments examined (Rooney 2005). ORVs in roadless areas pose a particular risk of spreading invasive non-native species because roadless areas often have less weeds present. Gelbard and Harrison (2003) found that ORVs are the chief vector for invasive species infestation in California roadless areas, which were shown to be very important refuges for native plants. Furthermore, as a result of ORV

⁹ Mahmood R.,Khan G.J., Alam S., Safi A.J., Salahuddin, Amin-ul-Haq. Cardiovascular effects of Short Term Noise of Constant Frequency and Intensity. Department of Physiology and Department of Biochemistry, Khyber Medical College and Khyber Girls Medical College: Peshawar, Pakistan. Pak J Physiol 2008;4(2). http://www.pps.org.pk/PJP/4-2/Rashid.pdf

use, the size and abundance of native plants may be reduced, which in turn permits invasive or nonnative plants to spread and dominate the plant community (GAO 2009).¹⁰

Invasive plant species decrease forage quality for livestock, big game, and other wildlife. Since, motorized travel on the Forest is largely being done by ORV, it is important to evaluate this impact in the EIS.

Furthermore, this analysis should assist the Forest with meeting the SNF LMP direction to protect and retain habitat which includes the native forage as noted below:

On crucial winter range, management is to maintain the quality and quantity of forage to encourage big game to winter on public lands and not move onto private lands. Management emphasizes the retention of an adequate quantity and quality of forage for wintering wildlife on big game crucial winter range following the commercial livestock grazing period. (SNF LMP, pg. 180, CD Version)

The Shoshone National Forest has a responsibility to manage for native vegetation and prevent the encroachment of invasive species (SNF LMP, pg. 20, CD Version).

In addition to the potential increase in road density and associated invasive species, current and proposed maintenance standards should also be examined in the EIS. Is it feasible and physically possible – based on what parameters – to maintain the proposed action, and each alternative proposed?

STREAM SEDIMENT & WATER QUALITY

Please evaluate all existing motorized route stream crossings, as well as their contributions to downstream contaminants and sedimentation levels, and examine methods for ensuring the highest water quality at each crossing. This same analysis should exist for all proposed routes, as well. Research suggests that stream crossings can contribute to degraded water quality and aquatic habitats:

While driving on roads has long been identified as a major contributor to stream sedimentation (for review see Trombulak and Frissell 2000), recent studies have found ORV use on trails to be a significant source of fine sediment in streams (Chin et al. 2004, Ayala et al. 2005, Welsh 2008). Stream sedimentation greatly degrades aquatic habitat (Newcomb and MacDonald 1991). For example, Chin et al. (2004) found that in watersheds with ORV use streams contained higher percentages of sands and fine sediment, lower depths and lower volume – all characteristics of degraded stream quality.¹¹

¹⁰ Switalski & Jones; Off-road vehicle best management practices for forestlands: A review of scientific literature and guidance for managers; Journal of Conservation Planning Vol 8 (2012), pg.16.

¹¹ Switalski & Jones; Off-road vehicle best management practices for forestlands: A review of scientific literature and guidance for managers; Journal of Conservation Planning Vol 8 (2012), pg.15.

Travel management seems to be an appropriate time to identify, evaluate, and plan for route improvements such as adding culverts and bridges where necessary to assist with maintaining and/or improving the stream quality and aquatic habitat. We also encourage the Forest to include a feasibility study with implementing water quality mitigation tools in this EIS.



Clarks Fork Ranger District – along Sunlight Creek off 182 – Illustrates:

- Motorized river crossing that raises concerns about effects on water quality.
- Dispersed campsite that raises concerns over noncompliance by camping closer than 100 feet from a stream and effects on water quality.¹²

Wind River Ranger District – along 548.1D/649 – Illustrates concerns about:

- Effects of motorized use on water quality near what appears to be a spring.
- Forest ability/inability to ensure proper route construction and maintenance.



Furthermore, please study the impacts of existing and proposed motorized routes on native cutthroat trout populations, spawning areas, and water temperature. Please refer to the scoping comments submitted by Trout Unlimited, as we share similar insights, concerns, questions, and requests for inclusion in the SNF Travel Management DEIS.

¹² http://www.fs.usda.gov/activity/shoshone/recreation/camping-cabins/?recid=35807&actid=34

WILDLIFE MIGRATION COORIDORS

Wyoming has seen an emergence of new studies around wildlife migration and landscape barriers/conflicts, which has triggered a need to facilitate research and dialog looking at possible protections for these important pathways. For example, the Wyoming Migration Initiative hosted an Emerging Issues Forum titled, *Sustaining Big Game Migrations in the West: Science, Policy, and People* in November of 2015, which SNF staff, other agencies, non-profits, and private landowners attended. The 2005 *Gallatin National Forest Travel Management Plan Record of Decision* recognized the value in protecting wildlife corridors: Bear Canyon Travel Planning Area (pg. 15), Lionhead Travel Planning Area (pg. 55), North Bridgers Travel Planning Area (pg. 58), Shields Travel Planning Area (pg. 60). With the recent influx of published research, please incorporate the most current migration data into this EIS, such as that produced by the scientists associated with the *Wyoming Migration Initiative* and the current *Invisible Boundaries* exhibit hosted at the Buffalo Bill Center of the West and National Geographic Headquarters.

Please study the impacts of motorized routes in relationship to large ungulate (elk, bighorn sheep, mule deer, moose, and pronghorn) migrations (both short and long movements) that occur in or pass through the Shoshone National Forest. Please include a correlation with historic green wave patterns (green up of plants moving up in elevation) and predictions related to climate change. Please include assessment of known or possible stopover sites and potential risk of fragmentation and potential risk to vegetative quality with new route construction. Please include an assessment of permeability of existing route system and those changes in the proposed action and in the alternatives.

Please refer to the scoping comments submitted by the Defenders of Wildlife, as we share similar insights, concerns, questions, and requests regarding wildlife for inclusion in the SNF Travel Management DEIS.

SEASONAL CLOSURES

Please include a thorough evaluation of the timing of current and proposed seasonal closures as to how the season may affect calving and migrating ungulates (both spring and fall migrations), spawning cutthroat trout, grizzly bears, erosion or resource damage, fire risk from ATV/OHV when fuel conditions are right¹⁶, and high/low water flows. Please include some evaluation of utilizing adaptive seasonal closure management based on variable climate conditions and unpredictable wildlife behavior. Consider in this evaluation whether the seasonal closures provide the flexibility to adapt to

¹³ Kevin L. Monteith, Vernon C. Bleich, Thomas R. Stephenson, Becky M. Pierce, Mary M. Conner, Robert W. Klaver, and R. Terry Bowyer 2011. Timing of seasonal migration in mule deer: effects of climate, plant phenology, and life-history characteristics. Ecosphere 2:art47. http://dx.doi.org/10.1890/ES10-00096.1

¹⁴ Sawyer, H.S. and M.J. Kauffman. 2011. Stopover ecology of a migratory ungulate. Journal of Animal Ecology 80:1078-87.

¹⁵ Sawyer, H., M.J. Kauffman, A.D. Middleton, T.A. Morrison, R.M. Nielson, and T.B. Wyckoff. 2013. A framework for understanding semi-permeable barrier effects on migratory ungulates. Journal of Applied Ecology 50: 68-78

¹⁶ Forest Engineering Research Institute of Canada. Evaluating the fire ignition potential of all-terrain vehicles in Alberta forests. Advantage Vol.5 No.8 February 2004. http://wildfire.fpinnovations.ca/40/ATVFinal.pdf

situations like the green wave during both wet and dry years, and times of years that may be wetter/drier based on current and future predictions of climate.

The seasonal bookends for winter travel seem to be in line with the purpose of creating a "manageable system." Please confer with neighboring forests and BLM lands to ensure this is enforceable across boundaries and high-low elevation transitions. Please include an assessment of minimum snow depth to prevent landscape damage in cross-country travel. Please study the impacts of climate change on snow levels, season length, snow quality, and relation to wildlife that live under snow, den within the snowpack, or roam actively on top during the winter. Please include review of adaptive management measures that could be utilized due to variable winter snow pack, new machinery with unforeseen environmental impacts, or if monitoring shows some other need for change.

DECOMMISSIONING MOTORIZED ROUTES

We remind the SNF of the Shoshone National Forest Land Management Plan, 2015 Revision, guidelines for closing or decommissioning motorized routes:

Close or decommission routes if:

- The travelway cannot be maintained due to natural events or human causes
- Unacceptable damage occurs to soil, wildlife, flora, cultural, aquatic, or other resources
- Financing or partnerships are not available to perform critical maintenance
- Route is not needed for access, or multiple routes exist (pg. 104, CD Version).

The Travel Management Planning Process is an opportune time to review existing System roads. For example, if there is a duplicate or parallel route, this is a good time to decommission the lower quality or less used route. If a route lacks a destination, purpose, or function then it should be deemed non-essential and eliminated. And if the route proves to cause major damage and/or is incompatible with general maintenance, then it makes sense to decommission the route and remove it from the System.

We encourage the SNF to examine and analyze the motorized routes, both authorized and unauthorized or illegal, throughout the forest. Please include analysis to recommend for decommissioning routes existing:

- inside the PCA and big game secure habitat,
- within existing inventoried roadless areas,
- within wetland and fen areas,
- along riparian corridors,
- within high alpine meadows,
- · within big game crucial winter range, and
- within one mile from the boundaries of Wilderness, Dunior Special Management Unit, the Primary Conservation Area, and Inventoried Roadless Areas.

As noted in the SNF LMP the forest has the responsibility to "Restore and maintain a diverse range of ecosystems (pg. 20, CD Version)." Decommissioning roads/trails facilitates ecosystem restoration. From our on the ground experience and other citizen-collected route monitoring information,¹⁷ it is clear that there are a considerable number of miles of unauthorized/illegal routes that should be decommissioned and restored.

GRIZZLY BEAR CONFLICT REDUCTION

Please assess the current and proposed routes for their accessibility to moth feeding sites and the potential to become a tourist attraction. Please include potential impacts on bears such as feeding disruptions or displacements, and require measures for mitigating those impacts and other possible human/bear conflicts associated with motorized access.

Please evaluate adding bear safe food storage options (poles/boxes/required approved personal storage containers) in popular road dispersed camping locations that are within or bordering the PCA and potentially other high conflict areas. Realizing there is a potential for an increase in human bear interactions, particularly in dispersed camping areas, this would be a proactive measure to reduce potential negative interactions between bears and humans.

DISPERSED CAMPING SPUR EXTENTIONS

NZ-27, NZ-36, NZ-37, NZ-38, NZ-39, NZ-40, WR-66 to 77, WK-06, WK-07, WK-32 to 34

Please provide further justification and analysis of how the Forest intends to prevent similar scenarios of dispersed campsites creeping beyond the end of the road or further than 300 feet away from the centerline of the road post completion of the travel management plan. Please include an assessment in the EIS of the available dispersed camping locations throughout the forest and determine the enforcement capacity and the impacts of continued camping on the nearby water sources, vegetation, Grizzly Bear habitat within the PCA, and other crucial wildlife habitat identified in the Forest Plan. Please consider if there are any portions of routes that should be removed from the availability for dispersed camping to protect resources or inability to continually enforce the distance rule. Refer to the Fish and Wildlife Service *Draft 2016 Conservation Strategy for the Grizzly Bear in the Greater Yellowstone Ecosystem* page 66 for mitigation and reducing human bear conflict.

SPECIFIC PROPOSALS IN SCOPING DOCUMENT

Clarks Fork, Wapiti and Greybull Ranger Districts

 NZ-01 bisects a narrow wildlife corridor. Please review Arthur Middleton's research, particularly on portions of the Clarks Fork Elk Herd that does not make the trip all the way to Lamar Valley, but is more of a resident herd. Please refer to Lichtendahl comments addressing elk from a local resident. Please refer to Tolman comments submitted as to concerns from a

¹⁷ Wyoming Wilderness Association. Motorized Travel Monitoring in the Shoshone National Forest. Spring 2016.

rancher who holds grazing permits in the area. Furthermore, during the field trip to this site, it was quite evident that those representing the motorized OHV users had no desire to use this area during the summer. But they had expressed a possible fall – winter – spring use. This is also the period of greatest potential for conflict with wintering wildlife. Please review "Line Creek_stelprd3852703" for the Forest's summary of this public field trip. This proposal is for a trail which will link to a road, where youth are not allowed to drive. Please evaluate the rationale for this proposal – does it really offer the desired opportunity for youth? What specific user groups benefit from this connecter? How does this align with the stated purpose and need which emphasizes loop opportunity, as it is a cherry stem? Is this "manageable" in terms of prohibiting illegal route pioneering in a very open and accessible landscape? Finally, please analyze the overall fiscal, resource, and need cost/benefit of this new route construction. Perhaps an alternative to consider is removing the road between the two private property blocks from the MVUM and make it an administrative road.

- NZ-03. Please provide assessment of these questions within the DEIS: Will moving the gate higher increase the traffic? And if so, will that impact wintering wildlife more than the current use does? How does the spring motor traffic affect the water quality as the road crosses over numerous seasonal water flows headed toward the river? To what degree would a seasonal closure of the lower roadway paralleling the river benefit the wildlife, native vegetation, and water quality? What seasonal closure would best support the health of that habitat and its inhabitants? Perhaps an alternative could consider moving the gate or adding another gate to the west closer to the BLM border and at the border of the Clarks Fork Wild River Corridor to allow a seasonal break on the lands paralleling the river and the wintering wildlife using that area.
- NZ-12 will likely open up more dispersed camping and hunting access. Please assess this impact
 on the water quality of Gwinn Creek; provide measures that ensure users will not enter the
 adjacent IRA; evaluate the likelihood of illegal route pioneering off this road and the
 enforcement associated with that behavior. We appreciate that this route is not new
 construction.
- NZ-14 and NZ-15 both claim loop opportunities, which was noted as part of the purpose and need. Please assess the likelihood of actual use of these small loops if they are built. Due to the long travel time to access these loops, it would be good to know if OHV users wanting loop opportunities would rather spend that travel time hauling and driving to the nearby Bighorn Forest or the south end of the Shoshone Forest where they would have access to an existing and larger loop system. Please assess what other user groups may benefit from this new construction. Please, also, evaluate the impacts of this proposed loop upon crucial winter ranges for moose and elk calving and crucial winter ranges identified in the Forest Plan within this area. Particularly include measures that prevent sound disturbance for elk, moose, grizzly bears and other user groups; measures to prevent invasive species distribution from affecting big game forage quality; and measures to prevent increased sediment or other pollutants in

local streams and ponds. Finally, please include an overall cost/benefit analysis of this new route construction.

- NZ-20. There are three parallel roads in this area, please provide analysis for choosing this over the others and assess the Forest's ability to decommission the proposed route for closure.
- NZ-23. Please assess the placement of the closure to ensure it is enforceable and defensible in a way that prevents violations such as circumventing a gate in order to protect the surrounding landscape.
- Winter Use Please refer to comments submitted by J.R. Johnson for the suggestion to restrict a portion of the route to trail only in order to protect wildlife in this narrow corridor. Please provide cost/benefit analysis of resource protection and user satisfaction for J.R. Johnson's proposal to limit use to trail. Also, please assess forest-wide future timber harvest effects on winter travel in those areas, especially in cases such as this with a narrow river corridor, special wildlife habitat, or other potentially sensitive areas becoming more accessible because of the harvest. Please evaluate a range of adaptive management tools to assist managers' ability to protect wildlife, water, and/or special habitats otherwise unaffected by current/proposed winter motorized use.

Wind River Ranger District

- Wind River District proposals Please refer to the scoping comments submitted by Wyoming Wilderness Association and the scoping comments submitted by Sierra Club, as we share similar insights, concerns, questions, and requests for inclusion in the SNF Travel Management DEIS.
- WR-11 converts an existing non-motorized trail to a motorized trail. Please assess the potential user conflicts that could occur with this type of conversion, as well as, any similar proposals that develop in the alternatives. Consider if one of the groups in conflict has another route correlating to their user preference (motorized or non-motorized) to access a key location, such as Moon Lake in this area. Furthermore, we urge the Forest to avoid bisecting the Inventoried Roadless Area and a larger landscape that is without much spur encroachment, allowing a potential wildlife sanctuary within the larger loop created by 554 and 531.
- WR-12 and WR-27. Please study the potential benefit with adding this connector making a loop, as well as the potential for unauthorized use off of these loops. Please include a cost benefit analysis of financial, social, and environmental elements to these proposed new constructions.
- WR-15, WR-20, WR-40, WR-43, WR-55. Please evaluate the Forest's ability to decommission these routes with a range of methods for decommissioning and ability to enforce these closures. Please study the impacts of these spurs on soil, vegetation, water, wildlife, and unauthorized use.

• WR-02w and WR03w. Please refer to the scoping comments submitted by Winter Wildland Alliance regarding these proposals, as we share similar thoughts and requests for inclusion in the SNF Travel Management DEIS.

Washakie Ranger River District

- Washakie District proposals Please refer to the scoping comments submitted by Wyoming Wilderness Association and the scoping comments submitted by Sierra Club, as we share similar insights, concerns, questions, and requests for inclusion in the SNF Travel Management DEIS.
- WK-01converts an existing non-motorized trail to a motorized trail. Please assess the potential
 user conflicts that could occur with this type of conversion, as well as, any similar proposals that
 develop in the alternatives. Furthermore, please avoid bisecting the Inventoried Roadless Area
 and analyze the use of this habitat by big game species and the possible displacement caused
 by the conversion of a non-motorized single track. Please provide a cost benefit analysis of
 constructing this motorized trail.
- WK-19. Please assess the cost of converting this to a non-motorized trail verses the cost of
 enhancing/improving the trail for continued motorized travel. Please evaluate the current
 impacts this motorized trail has on the neighboring wilderness, PCA boundary, and wetlands
 that it passes along/through. Please assess the motorized trail's current amount of use and the
 potential user displacement, along with the projected opportunity for non-motorized users
 with the conversion in relationship to other opportunities in the area.
- WK-26. Please study the potential gain with this connector adding a loop, as well as the potential loss of this loop affecting Pete's Lake access as an in/out destination. Please include all user group categories from those just fishing to recreational motorized riding to horse/hike access over to Shoshone Lake.
- WK-30 and WK-31. Please study the potential impacts with adding this connector making a loop, including the potential change in road density. Please study the impacts to neighboring Roadless areas. Please evaluate the crossing of Rock Creek for its effect on water quality and intended mitigation for this. Please include a cost benefit analysis of financial, social, and environmental elements to these proposed new constructions

CONCLUSION

GYC recognizes the importance of recreation and its social and economic role in the GYE. Throughout this process, it is important to realize that one Forest cannot be everything to everyone, while also serving the multi-use mandate. The Shoshone National Forest, America's first national forest, is 2,466,577 acers where 335 species of wildlife reside within an elevation span of 9,204 feet, ranging from sagebrush flats to alpine meadows. This is a unique forest flanking Yellowstone National Park. This forest is also part of a much larger landscape of public lands and we hope the EIS analysis will consider this in its study of benefits and impacts of the proposed action and develops alternatives. We look forward to a travel management planning outcome that supports and perpetuates the wild, Roadless and backcountry characteristic of this special national forest.

Respectfully,

Jenny DeSarro

Wyoming Conservation Associate

Greater Yellowstone Coalition